

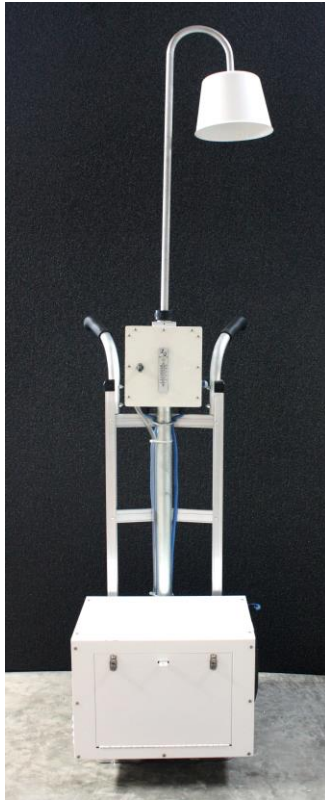


# F&J SPECIALTY PRODUCTS, INC.

*The Nucleus of Quality Air Monitoring Programs*

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## MOBILE LOW VOLUME AIR SAMPLER MODEL FJ-28BMHT



### GENERAL DESCRIPTION:

The Model FJ-28BMHT heavy duty hand truck mounted mobile low volume air sampler designed for outdoor use with an adjustable, aluminum sampling gooseneck. The adjustable gooseneck permits sampling at heights varying from 4' to 7' above floor level. Model FJ-28BMHT contains a standard rotameter for flow measurements. The air sampler is contained in a powder coat painted environmental enclosure mounted ~ 4 inches above ground level.

The FJ-28BMHT Air Sampler includes an oil-less, carbon vane vacuum pump with a constant airflow regulator for use where a nearly constant airflow is desirable. The regulator holds a constant pressure drop across an in-line orifice by varying the flow through a bypass valve into the pump. This system allows the pump to work at a minimum pressure drop at all times, permitting it to run cooler, thus extending its lifetime. The oil-less pump requires no lubrication to maintain optimal efficiency during its service life. The pump is mounted on a rugged mobile hand truck with two 10.5" diameter pneumatic tires to facilitate mobile transportation of the unit.

The FJ-28BMHT is designed for continuous indoor or outdoor use. Please consult the product specifications for the design temperature range and the installation category.

The typical operating flow range is 0.5 to 3.5 CFM (14 to 100 LPM) depending upon resistance of air filters utilized.

### NOTABLE FEATURES:

- Adjustable constant air flow regulator
- Easy access powder coat painted enclosure with exhaust fan
- Durable 1/4 HP oil-less carbon vane pump designed for continuous use
- Internal intake and exhaust mufflers
- Rotometer, flow measurement system
- 100-120VAC, 50/60Hz; single phase

**Rev:** 14 June 2018

# FJ-28BMHT LOW VOLUME AIR SAMPLER (100-120VAC)

## Mobile Unit with Adjustable Sampling Height

### SPECIFICATIONS:

**PUMP TYPE:** Oil-less, carbon vane 1/4 HP, 50/60 Hz

**MAXIMUM CAPACITY:**

4 CFM (115 LPM) at 0" Hg Pressure drop

**ULTIMATE VACUUM:** 25" (635 mm) Hg at sea level

**POWER REQUIREMENTS:** 100 – 120VAC, 50/60 Hz; 5.3 amperes; single phase

**CIRCUIT BREAKER PROTECTION:** 10 amperes

**ELECTRICAL CORD:** All temperature, 3 wire, 14 gauge

**THERMAL OVERLOAD PROTECTION:** Furnished as an integral part of the motor

**CONSTANT AIRFLOW REGULATOR:** Aluminum construction with silicone diaphragm; adjustable from 0.5 to 4 CFM (10-115 LPM)

**DIMENSIONS:** 24"L × 21"W × 55"H  
(61cm × 53 cm × 140 cm)

**SAMPLING GOOSENECK:** Adjustable to 7' (213 cm) sturdy aluminum

**WHEELS:** 10.5"D, pneumatic tires

**WEIGHT:** 80 lbs. (36 kg)

**INSTALLATION CATEGORY:** Pollution Degree 3

**OPERATING TEMPERATURE RANGE:**

20° to 122°F (-7° to 50°C)

**CALIBRATION:** Calibration verification 1 per year

**COMMUNICATIONS INTERFACE:** RS-232

**COUNTER-TOP CABINET FEATURES**

- Two handles
- Exhaust fan; 100 CFM
- Easy-open maintenance door
- Removable top
- Multi-louvered sides

**COMBINATION FILTER HOLDER:**

Durable plastic combination filter holders for F&J Model B, C or M charcoal cartridges and 47mm, 2" or 50mm diameter particulate filter paper are available. All models have quick-disconnect function.

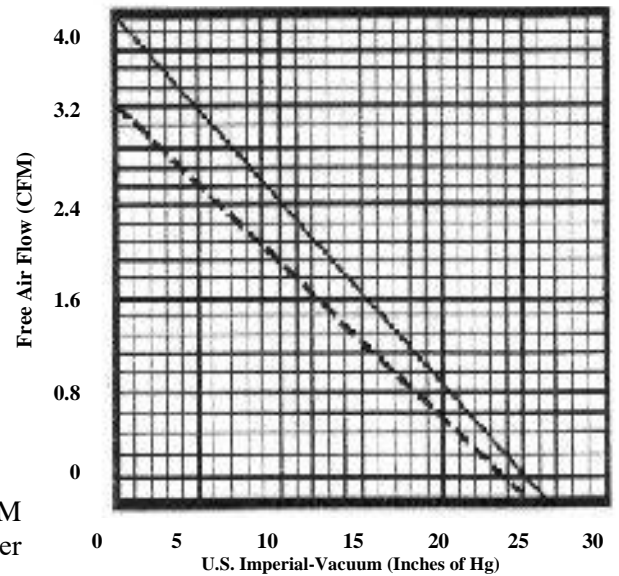
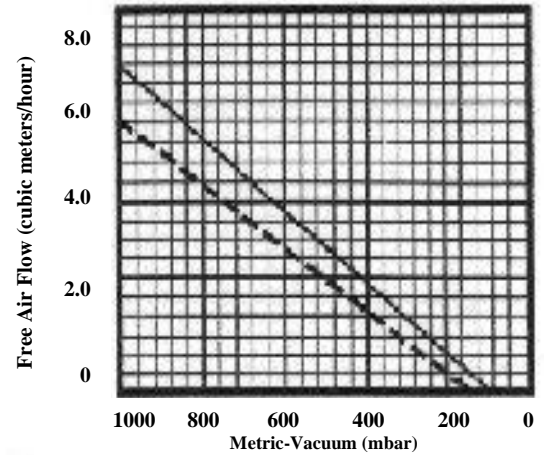
**STANDARD COMBINATION FILTER HOLDERS:**

<u>FILTER HOLDER MODEL</u>	<u>CHARCOAL CARTRIDGE DIMENSIONS</u>	<u>PARTICULATE PAPER DIAMETER</u>
FJ-05P	F&J MODEL B	2" or 50 mm
FJ-21P	F&J MODEL C	2" or 50 mm
FJ-35P	F&J MODEL B	47 mm
FJ-46P	F&J MODEL C	47 mm
FJ-51P	F&J MODEL M	2" or 50 mm
FJ-53P	F&J MODEL M	47 mm

### PUMP CURVE

Top line on curve is for 60-cycle performance  
Bottom line on curve is for 50-cycle performance

1425 RPM @ 50 Hz  
1725 RPM @ 60 Hz



CONSTANT AIR FLOW REGULATOR CURVE  
TYPICAL PUMP OPERATING FLOW RANGE

